

NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION

LAKE TROPHIC DATA

MORPHOMETRIC:

LAKE <u>Cub Pond, Little</u>	LAKE AREA (HA) <u>4.77</u>
TOWN <u>Danville</u>	MAXIMUM DEPTH (M) <u>2.3</u>
COUNTY <u>Rockingham</u>	MEAN DEPTH (M) <u>1.2</u>
RIVER BASIN <u>Merrimack</u>	VOLUME (M ³) <u>59,000</u>
LATITUDE <u>42° 55' N</u>	MUD SURFACE AREA (HA) <u>4.77</u>
LONGITUDE <u>71° 08' W</u>	RELATIVE DEPTH <u>0.9</u>
ELEVATION (FT) <u>205</u>	SHORE CONFIGURATION <u></u>
SHORE LENGTH (M) <u></u>	AREAL WATER LOAD (M/YR) <u>33.04</u>
WATERSHED AREA (HA) <u>345.2</u>	FLUSHING RATE (YR ⁻¹) <u>26.7</u>
% WATERSHED PONDED <u>7.0</u>	PHOSPHORUS RETENTION COEFF. <u>0.42</u>

BIOLOGICAL:

DATE	6 Sept. 1983
DOM. PHYTOPLANKTON (% total) ¹	Dinobryon (35%)
²	Mallomonas (25%)
NUMBER OF ALGAL GENERA	14
SPECIES DIVERSITY	2.45
CHLOROPHYLL <u>a</u> (µg/L)	11.42
DOM. ZOOPLANKTON (% total) ¹	Nauplius larvae (25%)
²	Calanoid copepods (15%)
ROTIFERS/LITER	141
MICROCRUSTACEA/LITER	334
TOTAL ZOOPLANK. CNTS (cells/L)	572
VASCULAR PLANT ABUNDANCE	Common
DOMINANT VASCULAR PLANTS ¹	Pontederia
²	Potamogeton
³	Sparganium
SECCHI DISK TRANSPARENCY (M)	1.5
BOTTOM DISS. OXYGEN (mg/L)	0.8
SEDIMENT: % ORGANIC MATTER	

LAKE TYPE:

SUMMER THERMAL STRATIFICATION: YES NO WEAK X

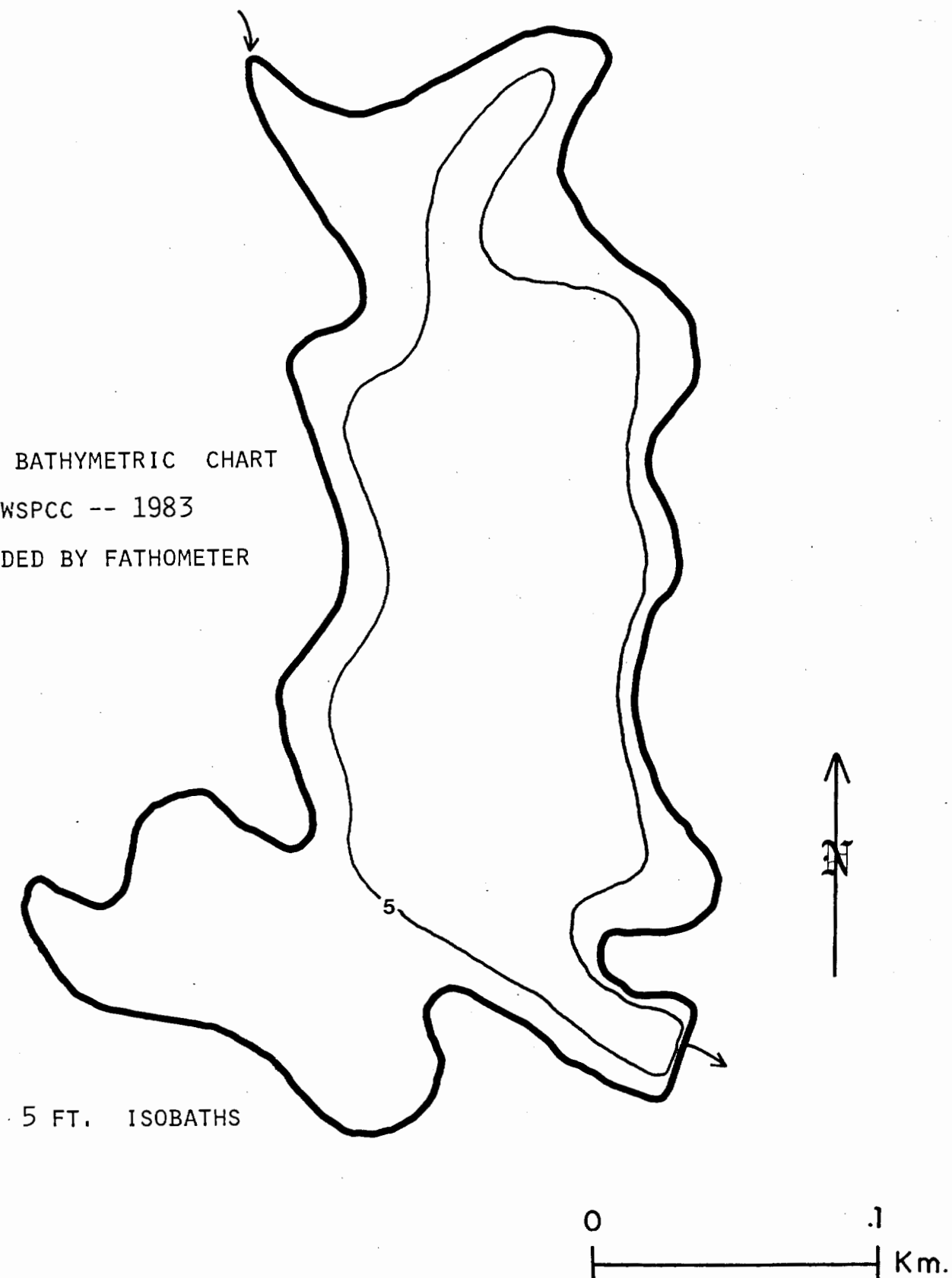
IF YES, VOLUME OF HYPOLIMNION 0 (m³) THERMOCLINE DEPTH - (m)

<u>CHEMICAL:</u> (mg/L unless indicated otherwise) LAKE: Cub Pond, Little						
	WINTER		SUMMER			
DATE			6 Sept. 1983			
DEPTH (M)			1.0			
pH (UNITS)			5.8			
ALKALINITY (I. P.)						
ALKALINITY (F.E.P.)			4.2			
NITRITE+NITRATE NITROGEN						
TOTAL KJELDAHL NITROGEN						
TOTAL PHOSPHORUS			0.021			
SPEC. CONDUCT. (μ Mhos/cm)			33.1			
APPARENT COLOR (UNITS)			80			
TRUE COLOR (440 nm)(UNITS)						
MAGNESIUM			0.64			
CALCIUM			2.4			
SODIUM			3			
POTASSIUM			0.7			
CHLORIDE						
TN : TP						
INORG-N : INORG-P						
[Mg+Ca] : [Na+K]			0.82			
CALCITE SATURATION INDEX			4.5			
* = NOT DEFENSIBLE NR = NO RESULT						
<u>TROPHIC CLASSIFICATION:</u> 1983						
		D.O.	S.D.	PLANT ABUND.	TOTAL CHL a PTS.	TROPHIC CLASS.
CLASSIFICATION POINTS:		3	3	2	3 11	EUTRO.
<u>COMMENTS:</u> 1. No winter samples were collected from this pond. Access road was very rough. 2. Water color dark brown. 3. No public access. 4. No thermocline was present.						

CUB POND, LITTLE

DANVILLE

ROUGH BATHYMETRIC CHART
WSPCC -- 1983
SOUNDED BY FATHOMETER



FIELD DATA SHEET

WATER BODY Cub Pond, Little TOWN Danville BY WSPCC
DATE COLLECTED September 6, 1983 WEATHER Hot, hazy & humid

STATION	DEPTH (M)	TEMP. (°C)	*DISSOLVED OXYGEN	OXYGEN: % SATURATION			
Deep Spot	0.0	26.0	7.9	98%			
	0.5	25.0	7.9				
	1.0	24.2	7.2				
	1.5	22.5	3.8				
	2.0	20.5	0.8	9%			

SECCHI DISK (M) 1.5BOTTOM DEPTH (M) 2.0TIME 1215

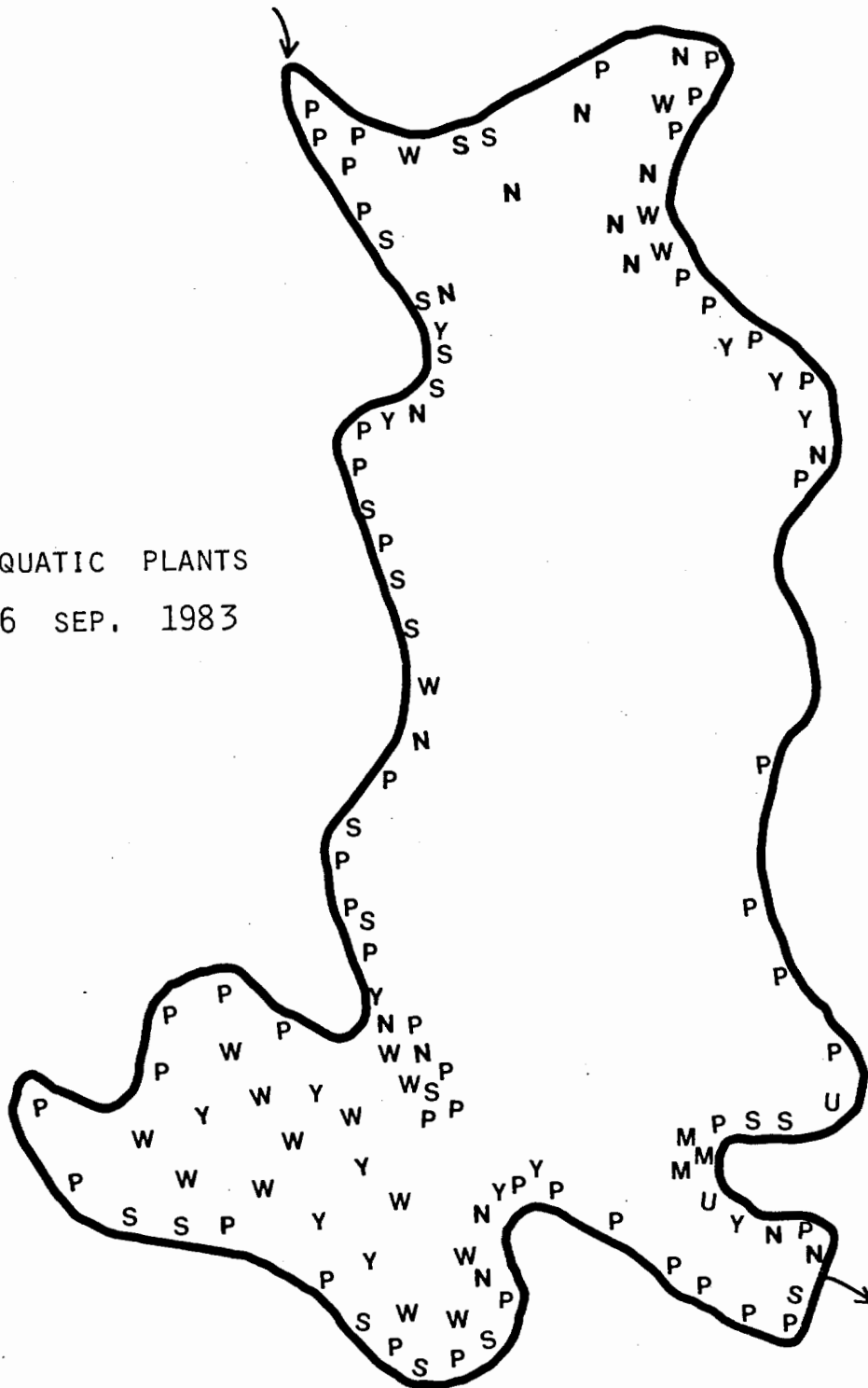
COMMENTS: A low bottom dissolved oxygen was present despite no thermocline. A small temperature decrease from top to bottom did occur.

* Dissolved oxygen values in mg/L

CUB POND, LITTLE

DANVILLE

AQUATIC PLANTS
6 SEP. 1983



0 .1 Km.

AQUATIC PLANT SURVEY

LAKE Cub Pond, Little TOWN Danville DATE 9/6/83 BY WSPCC

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
M	Myriophyllum humile	Water Milfoil	sparse
U	Utricularia	Bladderwort	sparse
P	Pontederia cordata	Pickereelweed	common
S	Sparganium	Bur Reed	common
N	Nymphaea	White Water Lily	common
Y	Nuphar	Yellow Water Lily	scattered
W	Potamogeton	Pondweed	common
OVERALL ABUNDANCE			common

GENERAL OBSERVATIONS:

1. Plants were common along the entire shoreline and were abundant in the shallow cove at the southwest end of the pond.
2. Submerged growth was probably more abundant than indicated in the deeper water, but the highly colored water restricted visibility.